

Work Order ID 110550

Friday, December 27, 2013 1:52:12 PM

TO re-esau **U/R** DAS 10 9-89
 110550 8 JAN

Item ID: D4775-041

D4775-041
 B110550

Accept

N9000040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Strut Assembly

Start Date: 12/27/2013 Start Qty: 20.00

20

Cust Item ID:

Required Date: 1/3/2014 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4775	B U/R								
110	Pick Kit	0.00							
110	Large Fab								
Packaging	Memo	0.00							
Packaging									
120		0.00							
120									
Small Fab	Memo	0.00							
Small Fab	① Apply Proseal ASSEMBLE AS PER DWG Proseal Batch: 127662								
	② Ensure Helical Does not Block Hole (50% Hole)								
130	QC5- Inspect part completeness to step on W/O	0.00							
130	Memo	0.00							
QC									
Quality Control									

19 FF 14-03-18 PTO →
 19

DQA:

Date: 14-03-18



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: 14/4/16

Work Order update only ☐

Work Order: <u>110550</u>	DISPOSITION Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS			
Part No. <u>MS 21209-F6-20</u>		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. <u>14-3759</u>		Machining <input type="checkbox"/>	Small Fab <input checked="" type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design				inserting Helicoil locking		Scrap + Destroy	FF		
Doc/Data				4x Tab on bottom broke	DAS 16 9-89	MS 21209-F6-15	14-03-18		DAS 16 9-89
Equip/Tooling				2x Tab on entering D4775-1		B 1128537		S	
Handling/Pre				broke off	Q52042 14/04/01				
Material	14-03-18	120	6	Some D4775-1 had a burr needed to re-tap all.		Returned To Stock	FF 14-04-01	14/04/01	Q52042 14/04/01
Operator						AN3-10A (2x) B128403			
Offset/Setup				Returned To Stock	14/04/01	D4777-1 (1x) B113699			
Process				AN3-10A (2x) B128403		D4776-1 (1x) B113289			
Supplier				D4777-1 (1x) B113699					
Training				D4776-1 (1x) B113289					
Transport									
Unapproved									

PL installation issues / Process

FAULT CATEGORY

Landing Gear

General

<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up
<input type="checkbox"/> Cracks	<input checked="" type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input checked="" type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge	
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread	were not done well done	
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set		
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration		
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence		

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110550

Page 2

Item ID: D4775-041

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N900040100

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Stop

NS2

Item Name: Strut Assembly

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20

Cust Item ID:

Required Date: 1/3/2014 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

Identify as per dwg & Stock Location: SI 204 0.00***140***

Packaging

Memo

0.00

19x14-4-1DAS
28
9-89

Packaging

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.00

14-04-2

Quality Control

#14-04-01

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____
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Picklist Print

Friday, December 27, 2013 2:24:47 PM

Page 1

Work Order ID: 110550

110550

Parent Item: D4775-041

D4775-041

Parent Item Name: Strut Assembly

Start Date: 12/27/2013

Required Date: 1/3/2014

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV:A 13.02.28 NEW ISSUE DD VERF:JFS
REV:B 13.08.26 PB1 DD VERF:JLM
13.09.26 AS PER REV.B DD VERF:JLM

IPP
IPP REV:C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4775-1		Manufactured	No	B113359		110	Each	0.0000	1	20			
- *D4775-1*									**	19		FF 14-03-19	DAS 26 9-89
Strut Tube													
D4777-1		Manufactured	No			110	Each	0.0000	1	(20)			
D4777-1 sh23									**			B11328 B113699	DAS 26 9-89
Rod End Bearing													
D4776-1		Manufactured	No			110	Each	0.0000	1	(20)			
- *D4776-1*									**			B113289	DAS 26 9-89
Basket Strut Clevis													
D4776-5		Manufactured	No			110	Each	0.0000	4	80		19 115192 FF 14-03-31	DAS 26 9-89
✓ *D4776-5*									**			5lex B112597	DAS 26 9-89
Spacer													
AN3-10A		Purchased	No			110	Each	325.0000	2	40			
AN3-10A									**			14-3-17	
Bolt													

Location

Loc Qty

Loc Code

ST511

150

m127817

150

ST513

175

m125709

175

m128403 6x,

38x

DAS
26
9-89

Picklist Print

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Page 2

Work Order ID: 110550

110550

Parent Item: D4775-041

D4775-041

Parent Item Name: Strut Assembly

Start Date: 12/27/2013

Required Date: 1/3/2014

Start Qty: 20.00

Required Qty: 20.00

MS21042L3

Purchased

No

110

Each

6,340.000

2

40

MS21042L3

FF 14-03-10

Nut

Location

Loc Qty

Loc Code

ST506

962

123900

962

ST509

5000

M127304

1000

M127410

3000

M127831

1000

ST510a

378

M126333

378

MS21209-F6-20

Purchased

No

110

Each

75.0000

1

20

MS21209-F6-20

FF 14-03-18

Heli-Coil, Locking

Location

Loc Qty

Loc Code

GA

75

125621

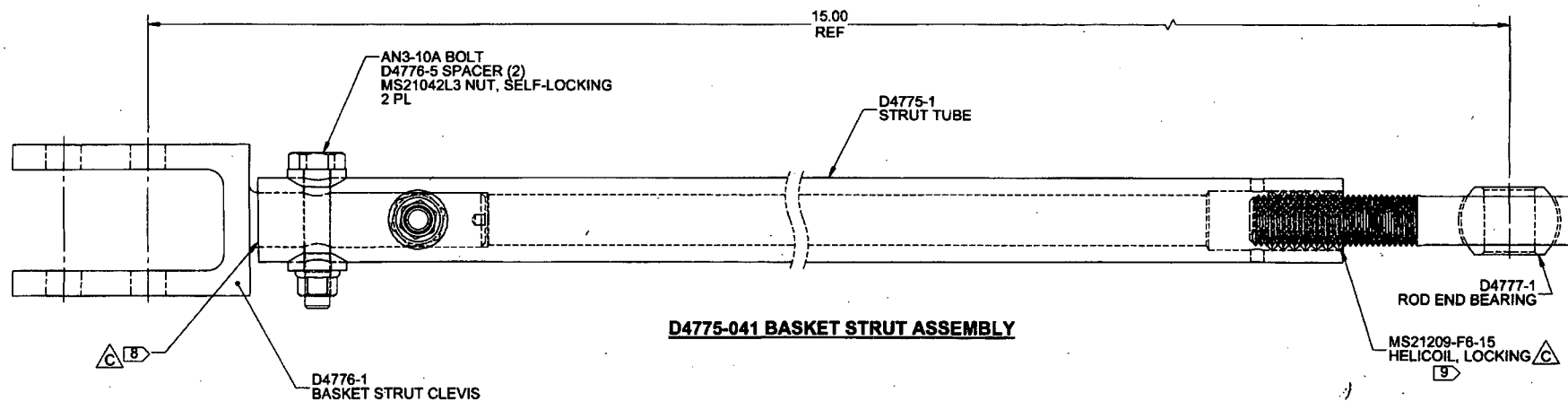
75

Batch: 128537

19

DAS
10
289

ITEM	QTY	P/N	DESCRIPTION
	X	D4775-041	BASKET STRUT ASSEMBLY
1	1	D4775-1	STRUT TUBE
2	1	D4776-1	BASKET STRUT CLEVIS
3	4	D4776-5	SPACER
4	1	D4777-1	ROD END BEARING
5	2	AN3-10A	BOLT
6	2	MS21042L3	NUT, SELF-LOCKING
7	1	MS21209-F8-15	HELICOIL, LOCKING



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.45 lbs
- 8) APPLY PROSEAL 890 B-2 (PRC) TO THE STEM OF ITEM 2 TO PREVENT RATTING.
- 9) ENSURE HELICOIL DOES NOT BLOCK HOLE

C	ITEM 7 WAS F8-20, B2-2 Ø0.088 "WITNESS HOLE" ADDED. REASON: CUSTOMER FEEDBACK. ADDED NOTE 8. REASON: DESIGN IMPROVEMENT.	AJS	13.11.01
B	DELETED WELD PINS (-3) REPLACED WITH FASTENERS. REASON: PREVENT CRACKING & EASE OF MANUFACTURE. C8-2 HOLE PATTERN ON -1 REVERSED TO ENSURE FASTENERS CLEAR STRUCTURE. FINISH NOTE MOVED TO -1 (SHEET 2).	AJS	13.08.14
A	NEW ISSUE	AJS	13.08.08
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	A.P.	DRAWING NO.	REV. C
MFG. APPR.		D4775	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		BASKET STRUT ASSEMBLY	NTS
DATE	13.11.01	<small> COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. </small>	

RELEASED
2014-01-07